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For Better or Worse: Friendship Choices and Peer Victimization among Ethnically Diverse Youth in the First Year of Middle School

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Abstract

As children approach early adolescence, the risk of peer victimization often increases. Many children experience some form of peer victimization during this time, but children who experience chronic victimization may be particularly vulnerable to adjustment difficulties. Thus, identifying risk and protective factors associated with chronic victimization continues to be an important area of research. This study examined the effect of change in the victimization of friends on change in children's own victimization, taking into account the ethnic group representation of children in their classes. Over 3,000 6th grade students (52% female; $M = 11.33$ years) were drawn from 19 middle schools varying in ethnic composition. Friendships were distinguished by type—reciprocal, desired, and undesired—and a novel methodology for measuring ethnic group representation at the individual level was employed. Multilevel modeling indicated that change in friends' victimization from fall to spring of 6th grade had a differential impact on children's own victimization by friendship type and that the benefits and consequences of change in friends' victimization were especially pronounced for children in the numerical ethnic majority. The findings underscore the role of friendship choices in peer victimization, even if those choices are not reciprocated, and highlight the unique social risks associated with being in the numerical ethnic majority.

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Authors' Contributions

LE conceived of the study, participated in its design and coordination, collected the data, performed the statistical analysis, participated in the interpretation of the data, and helped draft the manuscript; SG acquired the funding, participated in its design and coordination, participated in the interpretation of the data, and helped draft the manuscript. All authors read and approved the final manuscript.

Conflict of Interest

The authors report no conflict of interests.

Ethical Approval

All procedures involving human participants in this study were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent

Informed consent was obtained from all individual participants included in the study.

Keywords

peer victimization; desired friends; reciprocal friends; undesired friends; ethnic context

Introduction

In Don Merten's (1996) classic study on the transition from childhood to adolescence, he described four boys who were the victims of peer rejection and harassment. Known to the peer group as "mels," these boys each engaged in strategies to reduce their social visibility as victimized members of the group. One boy attempted to "hide" himself from his aggressors by wearing a long coat—a tactic that proved only to draw more negative attention to himself. The other three boys, who had been friends in elementary school, chose strategies that included trying to associate with more of their peers (especially the "popular" kids) and disassociating themselves from each other. For William, who made the greatest attempt at changing his reputation by publicly denouncing his friendship with other "mels," his efforts won him both a decrease in harassment and an increase in general peer acceptance. The boys in this study demonstrated that many victimized youth are aware of their social plight, and some may capitalize on friendships with their peers in order to improve their social standing. Recent empirical evidence also suggests that by associating with certain peers and *not* associating with others, victimized youth may use their friendship choices strategically to manage their peer reputation (Scholte et al., 2009).

In middle school, when peer aggression is at its peak (Eslea et al., 2003; Seals & Young, 2003), and the social and academic consequences of chronic victimization are so severe (see review in Juvonen & Graham, 2014; Hodges, Boivin, Vitaro, & Bukowski, 1999; Juvonen, Wang, & Espinoza, 2010; Nakamoto & Schwartz, 2010), the extreme emphasis that early adolescents place on their peers could make friendship choices a particularly useful and timely mechanism for changing one's reputation. However, peer victimization may be more or less amenable to change depending on the school or classroom context. For example, in ethnically diverse schools numerical ethnic majority status may be associated with greater visibility and thus social standing among peers (Cohen, Lotan, & Catanzarite, 1990; Graham & Juvonen, 2002; Verkuyten, Hagendoorn, & Masson, 1996; Verkuyten & Thijs, 2002). As such, children's victim reputations—and the effectiveness of their friendship choices in changing them—may be influenced by their ethnic group representation.

In the present study, the influence of friendships—more specifically, victimization among friends—on change in one's own victimization across the first year of middle school was investigated. Friendships were distinguished by type—reciprocal, desired, and undesired (each described below)—to account for the role of *choice* (who chooses who) in friendships. The influence of ethnic group representation in the classroom on the relationship between friendship and change in victimization was also investigated.

Friendship and Victimization

The victimization literature highlights the features of children's friendships that are associated with changes in victimization over time. Generally speaking, friendships buffer:

as the number of friendships increases, the likelihood of being repeatedly victimized decreases and the relationship between victimization and poor adjustment outcomes is weakened (see Fox & Boulton, 2006; Hodges, Malone, & Perry, 1997; Pellegrini & Long, 2002; Schwartz, Dodge, Pettit, & Bates, 2000). In addition, high quality friendships evidenced by features such as companionship, social support, and intimacy as well as the absence of conflict and betrayal, are also correlated with decreasing peer victimization (Boulton, Trueman, Chau, Whitehand, & Amatya, 1999; Hodges et al., 1999; Malcolm, Jensen-Campbell, Rex-Lear, & Waldrip, 2006; Rigby, 2000).

Regardless of number or quality, however, friendships with children who are victimized do not appear to provide any protection against chronic victimization oneself (Pellegrini, Bartini, & Brooks, 1999). For example, children with individual risk factors (e.g., internalizing or externalizing behaviors, low social preference) become more susceptible to victimization as their friends are more victimized (Hodges et al., 1997). Conversely, the relationship between individual risk factors and victimization weakens with increases in the social preference (popularity) of children's friends (Fox & Boulton, 2006). All in all, the evidence suggests that victimization among children and their friends may co-evolve over time.

Much of the previous research on friendship and victimization has relied on reciprocal nominations as the measure of friendship. While reciprocal nominations allow us to identify mutually agreed upon friendships, other types of friendship nominations may represent psychologically meaningful relationships from the perspective of the nominators (Furman, 1996; Hundley & Cohen, 1999) and thus may also be important to consider. For example, unilateral (unreciprocated) nominations may provide the opportunity to examine the role of friendship *choice* in peer victimization. Does it make a difference if a child chooses someone as a friend who does not reciprocate or if someone chooses that child as a friend and he does not reciprocate? In addition, since victimized children are less likely to *receive* friendship nominations than other children (Hodges et al., 1999), utilizing all nominations (both given and received) may provide a greater understanding of *all* children and how their friendships influence their victim status over time.

In the first study of peer victimization to differentiate between reciprocal and non-reciprocal friends, Scholte and colleagues (2009) defined three types of friends: *reciprocal* (nominated by the target child and reciprocated by the nominee), *desired* (nominated by the target child but *not* reciprocated by the nominee), and *choosing* (nomination *received* by another child but not reciprocated by the target child; hereafter referred to as *undesired*). Relying on a cross-sectional sample of Dutch adolescents, the authors reported that victims were less likely than other children to have reciprocal *and* undesired friends, suggesting that being chosen as a friend (whether or not the nomination is reciprocated by the target child) may be related to popularity or acceptance among peers. When victimized children did receive friendship nominations, however, they only reciprocated those that had come from peers with at least as much social status as themselves. In other words, victimization among reciprocal friends was equal to or less than but never greater than victimization among children themselves. For victimized children in particular, this meant that undesired friends were more victimized, on average, than even themselves. The authors also reported that

victimization among the desired friends of victimized children was lower than that of their reciprocal friends, suggesting that many victimized children may be actively seeking out friendships with higher status (i.e., less victimized) peers.

Building upon the Scholte et al. study, the first goal of the present study was to investigate the influence of victimization among friends—by type—on children’s own victimization *over time*. That is, are increases or decreases in children’s victimization influenced differentially by changes in victimization among different types of friends? In order to more fully understand the social consequences of victimization among friends, changes in the victimization of children were studied in conjunction with changes in the victimization of their friends. This allowed for a distinction to be made between friends who became more or less victimized over time.

Two competing theoretical perspectives guided our hypotheses about how changes in the victimization of children’s friends would influence changes in victimization among children themselves. According to the similarity or homophily hypothesis (cf. Duck, 1975; Kupersmidt, DeRosier, & Patterson, 1995; McPherson, Smith-Lovin, & Cook, 2001), friends are more likely than non-friends to be similar on a number of socially meaningful dimensions (e.g., personality, sociometric status). This hypothesis suggests that, regardless of friendship type, increases in friends’ victimization would be associated with increases in children’s own victimization and decreases in friends’ victimization would be associated with decreases in children’s own victimization. We hypothesized, however, that changes in victimization among children’s friends would be more impactful for some friendship types than others. Because reciprocal friends may be more similar to each other than unilateral or other non-reciprocal friends (Vitaro, Boivin, & Bukowski, 2009), we expected that changes in children’s own victimization would more closely mirror changes (for better or worse) in reciprocal compared to other friends’ victimization.

According to the normalcy hypothesis (Scholte et al., 2009), children may select friends with a more positive social profile than their own out of a desire to be more normally adjusted themselves. Friendship nominations—especially those that are not reciprocated—may therefore reflect children’s social awareness and goals. Perhaps this is why scholars have proposed that reciprocal friends are more similar but unilateral friends are more influential (Vitaro et al., 2009). Thus, the normalcy hypothesis suggests that the effect of changes in desired and undesired friends’ victimization on children’s own victimization could be more impactful than changes in reciprocal friends’ victimization depending on the direction of that change for both unilateral friendship types. For example, if socially savvy children seek friendships with more socially accepted peers, then decreases in desired friends’ victimization over time should be associated with decreases in one’s own victimization. However, seeking friendships with less socially accepted (e.g., victimized) peers could indicate low social awareness or social goals that could increase children’s own social vulnerability in the peer group. As such, having desired friends who become more victimized could result in an especially heightened risk of victimization over time. Regarding undesired friends, being chosen as a desired friend could indicate that the nominator perceives the target child to have positive social status. Therefore, having undesired friends who become less victimized over time could indicate social acceptance

among peers in good social standing and result in substantially less victimization over time. Thus, compared to reciprocal friends, the normalcy hypothesis would predict greater decreases in one's own victimization as the victimization of undesired friends decreases and greater increases in one's own victimization as the victimization of desired friends increases.

Victimization in Context

The continual transformation of the ethnic composition of the U.S. student population over the past few decades (c.f., U.S. Department of Education, 2000, 2010) has made ethnic context increasingly critical to our understanding of peer relationships within schools. To date, however, only a small body of research has examined the influence of the ethnic majority vs. minority status of students on their social status among peers (see Graham, 2006; Vervoort, Scholte, & Overbeek, 2010). The findings from this research are mixed—some studies report that ethnic minority youth are more likely to be victimized by their peers (e.g., Juvonen & Graham, 2002; Mouttapa, Valente, Gallaher, Rohrbach, & Unger, 2004; Verkuyten & Thijs, 2002; Wolke, Woods, Stanford, & Shulz, 2001) while others report that ethnic minority youth are actually less likely to be the targets of peer victimization (e.g., Hanish & Guerra, 2000; Nansel et al., 2001).

Some scholars suggest that numerical ethnic majority status leads to greater social status which, in turn, results in an imbalance of power between members of numerical majority and minority groups (Cohen et al., 1990)—the same imbalance of power that often corresponds with peer victimization (Olweus, 1991). If this is true, numerical ethnic minority status could indeed make children more susceptible to maltreatment from peers. However, there is also evidence to suggest that children in the numerical ethnic majority who do not fit in with their peers are especially vulnerable to victimization. For example, Graham, Bellmore, Nishina, and Juvonen (2009) posit that children in the numerical ethnic majority are more visible to the peer group and therefore suffer greater social consequences for deviating from the group norm of social dominance.

What about the role of ethnic context in the relationship between friendship and victimization? Might there be reason to believe that the influence of friends' victimization on children's own victimization would be different for numerical majority vs. minority group members? These are questions that have yet to be investigated in the peer victimization literature—but for which the answers are becoming increasingly important to understand given the growing diversity inside our schools. The next goal of the present study, therefore, was to examine the influence of numerical ethnic group representation on the relationship between changes in the victimization of children's friends and their own victimization over time. Due to the exploratory nature of this examination, no specific hypotheses were made. However, if numerical ethnic group representation (either minority *or* majority status) did prove to be a risk factor for peer victimization, it was expected that having friends who were victimized would only compound this risk. For example, being in the numerical ethnic minority and having victimized friends (two low status indicators) might result in even more peer victimization. On the other hand, being in the numerical ethnic majority and having victimized friends—thus defying the norm for group members

who *should* have high status—could result in the lowest status (i.e., highest victimization) of all. The design of the current study allowed these competing hypotheses to be tested.

The Present Study

The literature highlights features of children's friendships (e.g., number and quality of friendships, social status of friends) that are associated with peer victimization, yet has relied primarily on reciprocal friends to examine these relationships. In the present study, both reciprocal and *non*-reciprocal (i.e., desired, undesired) friends were investigated in order to include more youth at risk of being victimized and to consider the role of different types of friendship on peer victimization over time. Because of the increasing importance of understanding the influence of the school ethnic context on peer victimization, numerical ethnic group representation—independently and conjointly with friendship—was also studied here.

Until recently, research on peer victimization and school ethnic context has (more often than not) focused on societal majority vs. minority status. In addition, this literature has relied on school-level measures of ethnic composition, which may be problematic when school and classroom ethnic composition differ (e.g., due to academic tracking). In middle school, when children change classrooms for each course in which they are enrolled, measuring ethnic composition becomes even more complex since children in the same school could potentially be exposed to a different ethnic context—and hence a different set of social norms—depending on their course schedules. In the present study, a novel measure of numerical ethnic group representation was used in order to account for disparities in school and classroom ethnic composition as well as the individual experiences of children in middle school. This measure (described in detail below) was based on the proportion of same-ethnicity classmates in students' academic courses and was calculated separately for each student based on his or her course schedule, making it an *individual*-level measure of the school ethnic context. This new measure differs from traditional school- or classroom-level measures of ethnic context in which all students in the same school or classroom receive the same score.

Method

Participants

Participants were drawn from a larger sample of approximately 6,000 sixth graders across 3 cohorts of students participating in the UCLA Middle School Diversity Project. Students were enrolled in one of 26 middle schools in Northern and Southern California carefully selected to represent a variety of ethnic compositions, within the constraints of a public school system that is majority Latino. For example, some schools were ethnically diverse such that no single ethnic group represented a numerical majority in the population, and members of each of four major pan-ethnic groups (i.e., African American, Asian, Latino, and White) were present in the student population; some schools had 2 large and relatively equal ethnic groups (e.g., Latino and Asian) with very few members of other ethnic groups; and other schools had a clear ethnic majority group with a smaller number of members from each of the other ethnic groups. To reduce confounds of ethnic diversity with socioeconomic

status (SES), schools at the extremes of the SES continuum were avoided; only schools within a 20–80% range of free and/or reduced price lunch eligibility were recruited for the study.

Recruitment rates ranged from 63 to 95% ($M = 82\%$) across the 3 cohorts of students beginning in the 2009–2010 school year and continuing into the 2010–2011 and 2011–2012 school years. Participation rates ranged from 74 to 94% ($M = 83\%$). Research assistants visited schools regularly to encourage participation and students were offered incentives (e.g., gift card raffle) for returning consent forms.

All 6th graders in this study were enrolled in middle school and rotated classrooms for the various courses in their class schedule. At the time of this study, school records were available for 19 out of the original 26 schools (Cohorts 1 and 2). In order to use class schedules to calculate an individualized measure of ethnic group representation in the classroom, only participants from these 19 schools were included. Of these schools, 6 were ethnically diverse, 5 had two large but relatively equally-sized ethnic groups (2 Asian/Latino, 1 Asian/White, 1 African American/Latino, 1 Latino/White), and 8 had one large majority ethnic group (4 Latino, 2 Asian, 2 African American).

The ethnic composition of the sample is based on student self-report. Students were asked to select their ethnicity from one of 13 options: American Indian, Black/African-American, Black/other country of origin, East Asian, Latino, Mexican/Mexican-American, Middle Eastern, Pacific Islander (including Filipino), South Asian, Southeast Asian, White/Caucasian, Multiethnic/Biracial, and Other. For this study some groups were combined (Black/African-American and Black/other country of origin, East Asian and Southeast Asian, and Latino and Mexican/Mexican-American). The final sample consisted of 4,691 participants (1,711 Cohort 1 students; 2,980 Cohort 2 students; 52% female; $M = 11.33$ years); and the ethnic breakdown was 35% Latino/Mexican, 17% White, 14% East/Southeast Asian, 13% African-American, 13% Multiethnic/Biracial, and 9% Other students.

Procedure

Students with signed parental consent completed a questionnaire during a single period in the fall semester of one of their 6th grade classes. Students recorded their answers independently as they followed instructions being read aloud by a graduate research assistant who reminded them of the confidentiality of their responses. A second researcher circulated around the classroom to help students as needed. This procedure was repeated in the spring semester of 6th grade. At both waves of data collection, students were given an honorarium of \$5 for completing the questionnaire.

Measures

Victimization—Victim status among peers was determined by peer nomination. Students were presented with a roster containing the names of all students in their grade level at their school, arranged by name (alphabetically by first name) and gender. Using the roster, students were instructed to record the names of their classmates in response to the question, “Which 6th grade students get picked on by other kids (get hit or pushed around, called bad

names, talked about behind their backs)?” Students were allowed to record as many names as they desired but were instructed not to nominate themselves. Total nominations received were tallied for each student in the fall and spring of 6th grade.

Friendship—In the fall of 6th grade students were asked to list the names of their good friends in their grade at their school. The response form included seven spaces for listing names inasmuch as previous research suggests that students typically list 3 to 5 names using this unlimited nomination procedure (e.g., Bukowski, Pizzamiglio, Newcomb, & Hoza, 1996). Students were advised that they could request additional pages if needed.

Friendship type: All friendship nominations given and received were classified into one of three types. *Reciprocal* friends were distinguished by outgoing nominations given by the participant paired with incoming nominations given to the participant by the recipients of the original nominations. *Desired* friends were distinguished by outgoing nominations given by the participant that were not reciprocated by the recipients. *Undesired* friends were distinguished by incoming nominations given to the participant but not reciprocated (by the participant). The three friendship types were therefore mutually exclusive.

Victimization of friends: Victim nominations received by friends in the fall and spring of 6th grade were calculated for each participant by friendship type. Then a difference score for each friend was computed. Fall victim nominations of friends were subtracted from spring victim nominations so that scores greater than zero would indicate an increase in friends’ victimization from fall to spring and scores less than zero would indicate a decrease in friends’ victimization from fall to spring. Difference scores were then averaged across the friends of each participant for each friendship type.

Ethnic group representation—Using students’ self-reported ethnicity and their class schedules obtained from school records data, the proportion of classmates from students’ same ethnic group out of total classmates was estimated (based on participant data only) for each academic course in which they were enrolled (i.e., math, science, English, social studies), and then averaged across academic courses to indicate their ethnic group representation.

$$\sum_{i=1}^c \frac{n_{\text{same}}}{t} / n_c$$

As shown in the formula above, the sum of same-ethnicity classmates (n_{same}) out of total classmates (t) across all academic courses (c) was calculated for each student (i) and then divided by the total number of academic courses (n_c) in his or her class schedule, resulting in a proportion score ranging from 0 (no same-ethnicity classmates) to 1 (only same-ethnicity classmates). Because class schedules are unique to each student, students at the same school who shared the same ethnic background did not necessarily experience the same level of exposure to their group throughout the school day, making this a novel individual-level measure of ethnic group representation.

Analytic Strategy

To account for non-independence due to clustering within the data (students nested within schools), multilevel modeling using the PROC MIXED procedure in SAS 9.3 (SAS Institute Inc., 2011) was employed and a set of hierarchical linear models was estimated. Model fit was evaluated using 2 comparative fit indices available in SAS: Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC). Each index is used to calculate a chi-square difference test between models while accounting for factors such as sample size and the number of parameters in the model. For both indices, smaller numbers reflect better fit.

Covariates were entered in each model in order to control for differences in victimization due to gender, number of friends (for each friendship type), and average victimization of friends (for each friendship type). Both children's own grade-point average (GPA) and the average GPA of their classmates (based on course schedules) were also included as covariates in order to control for differences in victimization due to academic performance in general and academic performance relative to classmates. Proportion free and reduced-price meals was measured at the school level and served as the proxy for socioeconomic status to control for differences in victimization between schools. In addition, given the ethnic diversity of the sample and individual differences in the availability of same- and other-ethnicity peers throughout the school day, proportion cross-ethnic friends (for each friendship type) was included as a covariate in each model.

Results

Change in the victimization of children's friends was examined in conjunction with change in the victimization of children themselves across the first year of middle school. The influence of ethnic group representation on children's victimization over time was also examined. These relationships were studied independently for each of the three friendship types: reciprocal, desired, and undesired. Table 1 displays descriptive statistics for all study variables. Table 2 displays the results of the analytic models used to examine the influence of change in the victimization of children's friends (for all friendship types) on change in children's own victimization from fall to spring of 6th grade. Children were included in each analysis if they had at least 1 friend for the corresponding friendship type ($n = 3,233$ for reciprocal friendships, $n = 3,402$ for desired friendships, $n = 3,263$ for undesired friendships). As shown in Table 2, the analysis for each friendship type was carried out in 3 steps. First, all covariates and main effects were entered in each model, followed by all 2-way and 3-way interaction terms.

Influence of Change in Friends' Victimization

Reciprocal friends—As shown in Step 1 of the left column of Table 2, children's victimization in the fall was strongly associated with their victimization in the spring. The coefficient of .94 indicates a near 1-to-1 correspondence between fall and spring victimization (i.e., every 1-unit increase in fall victimization was associated with a .94 increase in spring victimization). Controlling for average victimization of reciprocal friends in the fall, increases in the victimization of reciprocal friends from fall to spring were also

associated with significant increases in children's own victimization, though this effect was much smaller (i.e., a coefficient of .09 indicates that every 1- unit increase in victimization from fall to spring among reciprocal friends was associated with a .09 increase in spring victimization among children themselves).

As shown in Step 2 of Table 2, the significant interaction between children's own victimization in the fall and change in their reciprocal friends' victimization from fall to spring indicates that the risk associated with being victimized in the fall was greater among children whose reciprocal friends became more victimized from fall to spring, and smaller among children whose reciprocal friends became less victimized from fall to spring. In other words, change in reciprocal friends' victimization moderated the relationship between children's own victimization in the fall and their victimization in the spring. As shown in the top panel of Figure 1, the more victimized children were in the fall, the greater the impact of change in their reciprocal friends' victimization. Consistent with our first hypothesis, increases in reciprocal friends' victimization led to greater increases in their own victimization, and decreases in reciprocal friends' victimization led to greater decreases in their own victimization.

Desired Friends—As shown in Step 1 of the middle column of Table 2 for desired friends, children's victimization in the fall was again strongly associated with their victimization in the spring. In fact, the coefficient of 1.00 indicates a perfect 1-to-1 correspondence (i.e., stability) between fall and spring victimization. Controlling for average victimization of desired friends in the fall, there was no main effect of change in the victimization of desired friends from fall to spring on change in children's own victimization. As shown in Step 2 of Table 2, however, there was a significant interaction between children's own victimization in the fall and change in their desired friends' victimization from fall to spring, indicating that the risk associated with being victimized in the fall was much greater among children whose desired friends became more victimized from fall to spring. As shown in the middle panel of Figure 1, this risk only diminished slightly for children whose desired friends became less victimized from fall to spring. In other words, while increases in desired friends' victimization led to substantial increases in children's own victimization, decreases in desired friends' victimization were associated with only minimal decreases in children's own victimization.

Undesired Friends—As shown in Step 1 of the right column of Table 2 for undesired friends, children's victimization in the fall was associated with their victimization in the spring, the coefficient for fall victimization (.79) being the weakest of all friendship types. Change in the victimization of undesired friends from fall to spring had a small but significant main effect on change in children's own victimization. However, like reciprocal friends, this effect was no longer significant once the interaction between children's fall victimization and change in the victimization of their undesired friends was entered in the model. As shown in Step 2 of Table 2, that interaction was significant. The bottom panel of Figure 2 shows that increases in undesired friends' victimization did not appear to increase children's own victimization, but decreases in the victimization of undesired friends led to substantial decreases in children's own victimization.

To summarize thus far, among all three friendship types there was a significant interaction between children's own victimization in the fall and change in friends' victimization from fall to spring. Generally speaking, the greater children's victimization in the fall, the greater the influence of their friends' victimization on their own victimization in the spring, though—consistent with our second hypothesis—the direction of this influence appeared to be sensitive to friendship type. To examine these findings more closely, the gradients of the simple slopes at varying levels of change in friends' victimization for each friendship type were derived (see Table 3). A slope of 1 indicates a 1-unit increase in victimization from fall to spring for every 1-unit increase in victimization in the fall (i.e., stable victimization over time); a slope greater than 1 indicates greater victimization in the spring compared to fall; and a slope less than 1 indicates less victimization in the spring compared to fall. As shown in the left column of Table 3, increases and decreases in reciprocal friends' victimization were associated with both relatively steep (1.21) and flat (.50) slopes, respectively, suggesting that victimization among reciprocal friends may be either a risk or protective factor depending on the direction of change in their victimization. As shown in the middle column, increases in desired friends' victimization were associated with the steepest slopes (1.30), suggesting that desired friends who become more victimized over time may be a particular risk factor for becoming more victimized oneself. As shown in the right column, decreases in undesired friends' victimization were associated with the flattest slopes (.39), suggesting that undesired friends who become less victimized over time may be especially protective against one's own chronic victimization.¹

Influence of Ethnic Group Representation

To investigate the influence of numerical ethnic majority vs. minority status in the classroom on change in children's victimization from fall to spring of 6th grade, ethnic group representation (calculated as the proportion of same-ethnicity classmates) was included as a main effect in Step 1 of each model and included in an interaction term with fall victimization for each friendship type (see Table 2). Although there was no main effect of ethnic group representation in any model, there was a significant interaction with fall victimization in the models for desired and undesired friends. In these two models, numerical ethnic majority status was associated with greater victimization in the spring the more children were victimized in the fall.

Ethnic group representation was then included in a 3-way interaction term with fall victimization and change in the victimization of friends in order to investigate the influence of numerical ethnic majority vs. minority status in the classroom on the relationship between change in the victimization of children's friends and change in children's own victimization (see Step 3 of Table 2).² For all friendship types there was a significant 3-way interaction between own victimization in the fall, change in friends' victimization from fall to spring,

¹Differences between slopes across friendship type were not tested.

²As is customary when modeling 3-way interactions, ethnic group representation was first included in an interaction term with change in the victimization of friends (as shown in Step 2 of Table 2), even though this relationship was not of primary interest. In the model for reciprocal friends only, this interaction had a small, statistically significant effect on children's victimization in the spring. However, the effect was not of practical significance (i.e., even with change in the victimization of reciprocal friends at 2 *SD* above and below the mean—indicating substantial increases or decreases in victimization among friends, respectively—the difference in change in children's own victimization across the entire range of ethnic group representation—0 to 1—was less than .1).

and ethnic group representation. The six panels of Figure 2 depict the change in children's victimization from fall to spring of 6th grade based on change in their friends' victimization (distinguished by friendship type) at high (majority status) and low (minority status) ethnic group representation in the classroom.

For all three friendship types, being in the numerical ethnic majority and having friends who became more victimized was associated with the greatest increase in one's own victimization (see solid line in all right panels). This increase was especially pronounced for desired friends (see middle right panel). With regards to reciprocal and undesired friends, being in the numerical ethnic majority and having friends who became less victimized was also associated with the greatest decreases in children's own victimization over time (see dashed lines in top and bottom right panels). Similar to the results reported in the previous model, however, having desired friends who became less victimized did little to reduce the victimization of children themselves, regardless of ethnic group representation (see dashed line in middle left and right panels).

Following procedures outlined by Aiken and West (1991) and Dawson and Richter (2006) for probing interaction effects, differences between slopes were tested for all pairs of slopes (within friendship type) shown in Figure 2 in order to further explore the above 3-way interaction effect for each friendship type. Table 4 displays the *t*-values for these differences. Consistent with the patterns reported above, for all friendship types the slope for increased victimization of friends among children with high ethnic group representation was significantly steeper than the slope for increased victimization of friends among children with low ethnic group representation (see pairs of slopes for slopes 1 and 2). This finding indicates that the risk associated with having friends (both chosen and chosen by) who became more victimized over time was greater for children in the numerical ethnic majority compared to children in the numerical ethnic minority (see increase in slope of solid line from left to right panels for all friendship types in Figure 2). For reciprocal and undesired friends, the slope for decreased victimization of friends among children with high ethnic group representation was significantly flatter than the slope for decreased victimization of friends among children with low ethnic group representation (see pairs of slopes for slopes 3 and 4). This finding indicates that being chosen by friends (reciprocal or undesired) who became less victimized over time was a greater protective factor for children in the numerical ethnic majority compared to children in the numerical ethnic minority.

Discussion

Although previous research has examined the influence of reciprocal friends on the victimization experiences of children, the literature has just begun to consider how other, *non*-reciprocal friends might play a role in children's victimization by their peers. In this study, an important distinction was made between reciprocal, desired, and undesired friends in order to investigate whether different types of friendship have a differential influence on the increase and/or decrease in children's victimization over time. The findings revealed a significant influence of change in friends' victimization on change in children's own victimization, suggesting that peer victimization among children and their friends co-evolves over time. However, the impact of change in friends' victimization on children's own

victimization varied depending on friendship type. Changes in reciprocal friends' victimization led to corresponding changes in children's own victimization (in either direction), but increases in victimization appeared to be most likely for children whose *desired* friends became more victimized, and decreases in victimization appeared to be most likely for children whose *undesired* friends became less victimized. Thus, while there was some support for the similarity hypothesis, the results provided more support for the normalcy hypothesis that social goals and social awareness are more important determinants of friendship effects over time.

Why might changes in the victimization of reciprocal, desired, and undesired friends have a differential influence on change in children's own victimization? The answer may lie in the very nature of these friendships themselves. Namely, reciprocal and desired friends require that nominations be *given* by children, whereas reciprocal and undesired friends require that nominations be *received* by children. Hence, nominations given may represent the choices (i.e., social motives) of children themselves while nominations received may represent the choices (i.e., social acceptance) of the peer group to which children belong.

In middle school, when children often value social rank above all else (Fournier, 2009), those who appear to defy this social norm by choosing low status (i.e., victimized) friends may be at increased risk for peer victimization. That is, when children endorse or seek out friendship with peers (in the case of reciprocal or desired friends) whose victimization *increases* over time, they may demonstrate low social priorities or even social awareness among their peers. Because undesired friends, even those who become more victimized, do not reflect the social motives of their targets (who did *not* choose them as friends), they have less power to impact increasing changes in children's victimization.

On the other hand, being sought out by peers (in the case of both reciprocal and undesired friends) whose victimization *decreases* over time could be an indication of greater popularity or acceptance, especially among those with improving status in the peer group, thus decreasing children's risk of being victimized over time. Because desired friends, even those who become less victimized, do not reflect the social acceptance of those who nominated them, they cannot provide such protection. In sum, the direction of the friendship may predict the direction of change in victimization, with increases in the victimization of *outgoing* ties (reciprocal and desired) more likely to be associated with increases in victimization and decreases in the victimization of *incoming* ties (reciprocal and undesired) more likely to be associated with decreases in victimization.

It is important to keep in mind that for all friendship types, change in friends' victimization was most influential at high levels of children's own victimization in the fall of 6th grade, suggesting that change in the victimization of children's friends does not influence change in one's own victimization for children who are not already at risk for being victimized. Among children who *are* victimized, change in the victimization of their friends may distinguish those who become chronic victims from those who assimilate into the peer group over time, making friendship choices—made by children *and* their peers—a key predictor of social adjustment among victimized children in the first year of middle school.

As demonstrated in the final stage of the analysis, ethnic group representation of children in their classrooms had a significant impact on the relationship between change in friends' victimization and change in children's own victimization, most often magnifying the effect of friends' victimization for numerical ethnic majority members. For example, among children whose desired friends became more victimized, majority status led to the greatest increase in their own victimization. Among children whose reciprocal friends became less victimized, majority status led to the greatest decrease in their own victimization.

These results lend support to the hypothesis that numerical majority group status may increase the social visibility of children which may, in turn, exacerbate or alleviate the risk of peer victimization. That is, being in the numerical majority and making friendship choices that reflect low social awareness (i.e., having desired friends who become more victimized) may make victimized children especially stand out as low status members of the peer group, increasing their already heightened risk for chronic victimization. Numerical majority group members who are victimized may also be at greater risk for poor mental health outcomes since they may be more likely than numerical minority group members to engage in characterological self-blame (Graham et al, 2009). In other words, when children who *should* have the most status (given their numerical representation) have the least status (as victims of peer aggression), they may attribute their social plight to their own perceived character or personal flaws, thus increasing their vulnerability to mental health problems such as loneliness, depression, and social anxiety. On the contrary, being in the numerical majority and being chosen as a friend by children who are improving in social status (i.e., having reciprocal or undesired friends who become less victimized) may help once victimized children to stand out as more normative members of the peer group, substantially decreasing their risk for future victimization and improving their overall adjustment.

Contributions

This study makes several noteworthy contributions to research on peer victimization. First and foremost, the findings strongly suggest that the role of friendships in victimization is more complex than has previously been considered in the literature. By distinguishing between children's reciprocal, desired, and undesired friendships, this study broadens our understanding of how different types of friendships may serve as either risk or protective factors in children's victim status over time. By examining the role of desired and undesired friends in particular, this is one of the first longitudinal studies of victimization to include children *without* reciprocal friends. In doing so, this study demonstrates that *choosing* friends and *being chosen by* friends are distinct processes with unique social outcomes that may differentiate some victimized children from others.

Incorporating the ethnic context in which friendships occur provides a backdrop for peer relationships that may be more relevant for today's multiethnic schools. The findings are consistent with other studies that have documented the vulnerabilities associated with being in the numerical ethnic majority (see Juvonen & Graham, 2014), and suggest that numerical majority group members may not only be more visible to their peers but suffer more negative outcomes when they deviate from peer norms. Thus, having a numerical balance of power in which no single ethnic group represents the majority of the student population in a

given school may be especially protective for children at risk for peer victimization. Because a numerical balance of power is more likely to occur in ethnically diverse schools, the present findings underscore some of the social benefits for at risk youth of attending schools that are ethnically diverse (Graham, 2006).

The limited body of victimization research that has taken ethnic context into account has until now relied solely on school-level indicators of majority vs. minority group status. By using students' course schedules to measure ethnic group representation at the *individual* level, this study utilizes a novel methodological approach that helps us better understand the ethnic exposure children actually experience throughout the school day. Since children may be more likely to select friends from the classes in which they are enrolled than from the general student body at their school, this new measure of ethnic representation may be particularly useful when studying friendships—and may even help us think of other important features of the school context that could be measured at the individual level. In the first year of middle school, when peer reputations and social hierarchies are being formed, having measures that take into account the unique experiences of children as they move from course to course may be especially critical in identifying risk and protective factors for peer victimization and other forms of social adjustment.

Limitations and Future Directions

Despite noteworthy contributions, some limitations of this study should be considered. First, friendship nominations given or received that were not reciprocated were referred to as friendships though it is possible that no such friendship existed (at least from the perspective of the nominee). Previous research suggests that unilateral friendships are personally meaningful to the nominator and may thus be socially meaningful in the peer group (Furman, 1996; Hundley & Cohen, 1999). However, it may be more conceptually accurate to distinguish between actual friendships (in the case of reciprocated nominations) and friendship choices (in the case of non-reciprocated nominations) that merely reflect the desire for or perception of friendship. A second limitation is that the measure of victimization used in this study was based on a broadly worded peer nomination question that included physical, verbal, and/or relational forms of peer aggression. As such, this measure did not allow us to examine whether there might be differential associations between change in the victimization of friends and the victimization of children themselves across these various forms. Third, although it was suggested that choosing friends who become victimized may reflect poor social awareness and being chosen as a friend by peers who become less victimized may reflect peer acceptance, neither social awareness nor acceptance was explicitly tested here. We hypothesize that social awareness and peer acceptance are social mechanisms through which the influence of friendship choices on peer victimization may operate. This is an important topic for future research.

In this study, change in the victimization of friends was based on nominations given and received at one point in time (fall of 6th grade). Given the dynamic nature of friendship ties during the early adolescent years, it would also be important to document change in friendship ties themselves (e.g., are children likely to re-nominate friends who are victimized? And do changes in nominations predict changes in victimization?). Additionally,

using school records such as course schedules to create individualized measures of school context was a lengthy and time-intensive process; as such, the results reported here are only based on two time points in the larger longitudinal study from which the data were taken. The inclusion of data from later waves of the study will be critical in understanding important topics such as whether friendship choices predict changes in friendship type (e.g., are desired friends likely to become reciprocal friends?).

The focus of this study was on numerical ethnic representation not ethnic group membership per se. As such, future research might also consider the role of specific ethnic groups in the numerical majority or minority on peer victimization. In addition, while this study draws upon a large, diverse set of schools, not all ethnic group configurations were represented in the sample (e.g., there were no participants from balanced African America/Asian or African American/White schools). As schools become more diverse and more configurations of ethnic groups become available to study, it will be important to take into account both numerical ethnic representation and ethnic group membership for all configurations of ethnic groups.

A final limitation relates again to the measurement of ethnic representation. In this study, school ethnic context was measured by students' own ethnic group representation (i.e., numerical minority vs. majority standing in the classroom) without taking into consideration the overall balance of ethnic groups in their classrooms or at their school. It is therefore unclear how social reputations may be shaped differentially when there are a varying number of ethnic groups in the student population. For example, being in the numerical ethnic minority may be more or less of a risk factor for chronic victimization when there are multiple other ethnic minority groups compared to when there is a small, single ethnic minority group and a large, single ethnic majority group. Future research using individual measures of diversity that account for the size *and* number of ethnic groups present in students' classrooms should further explore this important feature of the school ethnic context.

Conclusion

There was a time in the study of peer victimization that having friends was believed to be protective as long as those friends were not victims themselves (Hodges et al., 1997; Pellegrini et al., 1999). Our findings indicate that the social lives of those at risk for victimization in today's urban schools are more complex than that. When it comes to peer victimization, some friendship types matter more than others. Children who choose friends who are victimized may be at particular risk for chronic victimization. On the other hand, children who are chosen as friends by peers who are not victimized may be especially protected from chronic victimization. These patterns are pronounced for children in the numerical ethnic majority in their classes, highlighting the importance of studying peer victimization in context and complementing previous research that documents the social risks and benefits associated with ethnic group representation (Bellmore, Witkow, Graham, & Juvonen, 2004; Graham, 2006; Graham et al., 2009). Adding to a limited body of research that considers the social significance of all types of friendship (cf. Furman, 1996; Hundley & Cohen, 1999; Scholte et al., 2009) and measuring school ethnic context in a way that takes

into account the individual experiences of students in middle school, we bring together several key aspects of children's social experiences—friendships and friendship choices, peer victimization, and the school ethnic context—that independently and conjointly have a substantial impact on children's overall adjustment and well-being in school.

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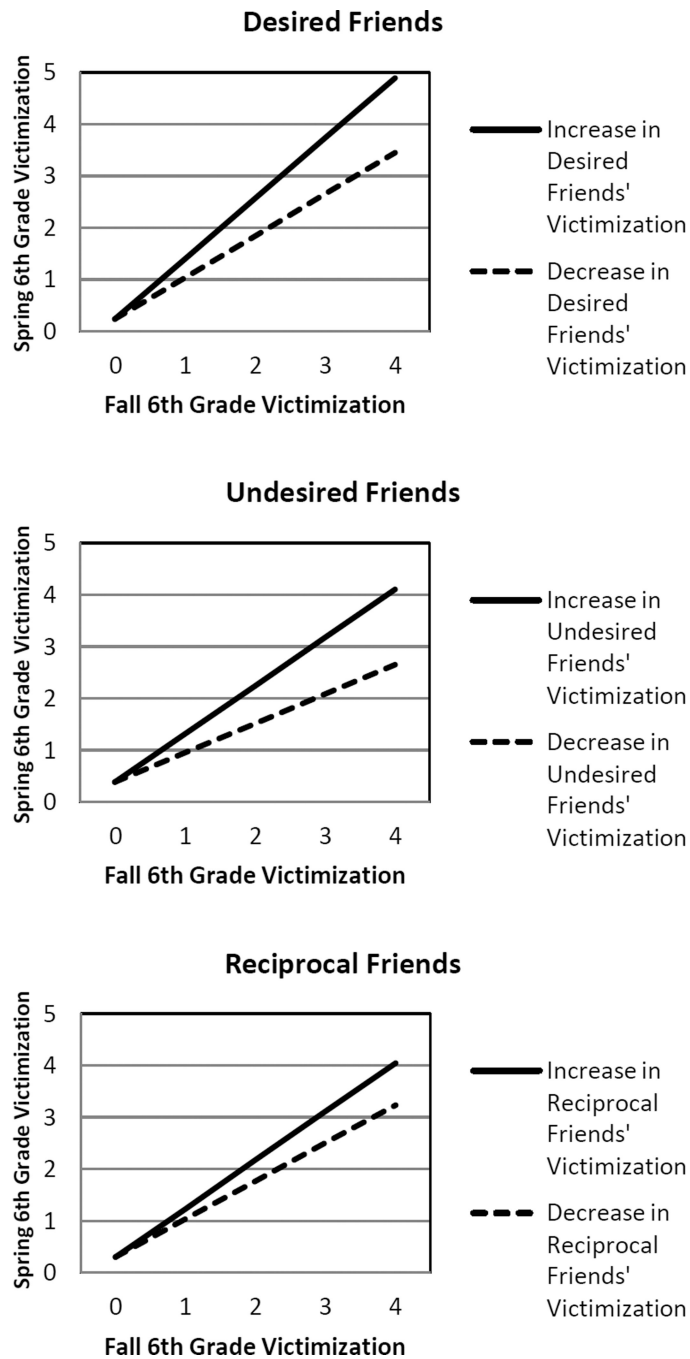


Figure 1. Change in victimization from fall to spring of 6th grade based on change in reciprocal, desired, and undesired friends' victimization. Increases/decreases in friends' victimization based on change in friends' victimization from fall to spring of 6th grade at 2 SD above/below the mean depending on friendship type (see Table 2).

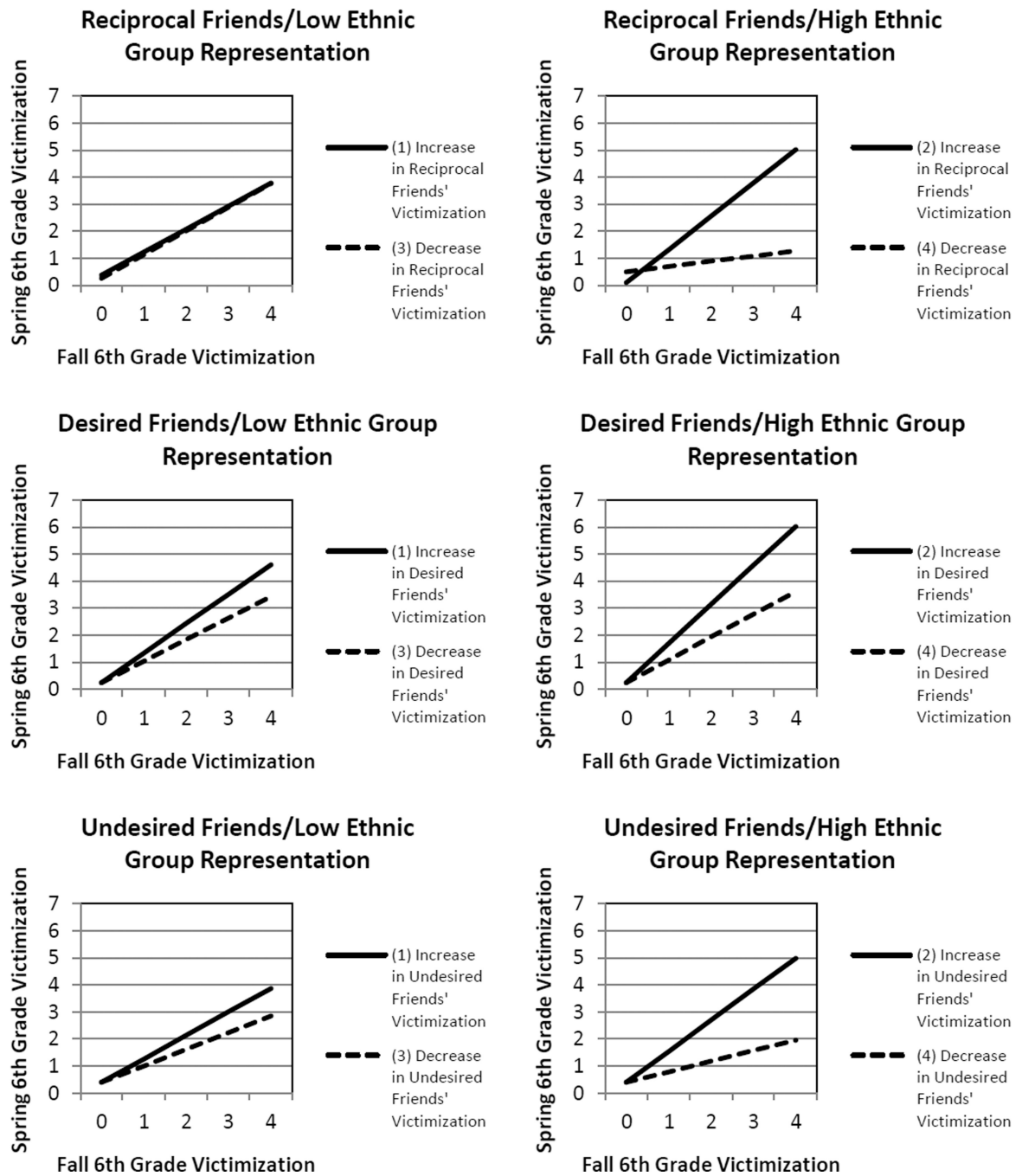


Figure 2. Change in victimization from fall to spring of 6th grade based on change in desired, reciprocal, and undesired friends' victimization (at 2 SD above/below the mean) and varying levels of ethnic group composition (low = 25% same-ethnicity classmates; high = 75% same-ethnicity classmates). Differences between all numbered slopes (by friendship type) are shown in Table 4.

Table 1

Descriptive Statistics for Study Variables

	M	SD
Fall Victimization	0.34	0.88
Spring Victimization	0.57	1.49
Proportion Free or Reduced-Price Meals	0.50	0.17
Grade-Point Average (GPA)	2.92	0.88
Classmates' Average GPA	2.89	0.47
Ethnic Group Representation	0.37	0.23
Number of Reciprocal Friends	2.33	1.26
Number of Desired Friends	2.59	1.45
Number of Undesired Friends	2.59	1.71
Proportion Cross-Ethnic Reciprocal Friends	0.52	0.44
Proportion Cross-Ethnic Desired Friends	0.56	0.43
Proportion Cross-Ethnic Undesired Friends	0.53	0.40
Average Fall Victimization of Reciprocal Friends	0.32	0.70
Average Fall Victimization of Desired Friends	0.33	0.63
Average Fall Victimization of Undesired Friends	0.36	0.82
Change in Victimization of Reciprocal Friends	0.16	0.83
Change in Victimization of Desired Friends	0.15	0.86
Change in Victimization of Undesired Friends	0.26	1.12

Note. *M* = Mean. *SD* = Standard Deviation.

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Table 2

Influence of Change in Friends' Victimization and Ethnic Group Representation on Change in Own Victimization from Fall to Spring of 6th Grade

	Reciprocal Friends			Desired Friends			Undesired Friends		
	Step 1 Est. (S. E.)	Step 2 Est. (S. E.)	Step 3 Est. (S. E.)	Step 1 Est. (S. E.)	Step 2 Est. (S. E.)	Step 3 Est. (S. E.)	Step 1 Est. (S. E.)	Step 2 Est. (S. E.)	Step 3 Est. (S. E.)
Intercept	.27 (.05) ***	.31 (.05) ***	.31 (.05) ***	.23 (.05) ***	.24 (.05) ***	.24 (.05) ***	.35 (.05) ***	.39 (.05) ***	.39 (.05) ***
Female	-.05 (.04)	-.05 (.04)	-.04 (.04)	-.06 (.04)	-.06 (.04)	-.05 (.04)	-.09 (.04) *	-.09 (.04) *	-.09 (.04) *
Free/ Reduced-Price Meals	.12 (.20)	.14 (.20)	.06 (.20)	.05 (.18)	.00 (.19)	.00 (.19)	.12 (.17)	.14 (.18)	.13 (.17)
Grade-Point Average (GPA)	-.06 (.03) *	-.07 (.03) *	-.07 (.03) **	-.06 (.03) *	-.06 (.03) *	-.06 (.03) *	-.11 (.03) ***	-.10 (.03) ***	-.10 (.03) ***
Classmates' Average GPA	.11 (.05) *	.10 (.05) *	.08 (.05)	.07 (.05)	.06 (.05)	.06 (.05)	.08 (.05)	.05 (.05)	.06 (.05)
Number of Friends	-.05 (.02) **	-.05 (.02) **	-.05 (.02) **	-.01 (.02)	-.01 (.02)	-.01 (.02)	-.03 (.01) *	-.03 (.01) *	-.03 (.01) *
Average Fall Victimization of Friends	.17 (.05) ***	.13 (.03) ***	.13 (.03) ***	.11 (.03) **	.11 (.03) **	.11 (.03) **	.03 (.02)	.00 (.02)	-.01 (.02)
Proportion Cross-Ethnic Friends	.03 (.05)	.05 (.05)	.05 (.05)	.05 (.06)	.04 (.06)	.05 (.06)	.07 (.06)	.08 (.06)	.08 (.06)
Fall Victimization	.94 (.02) ***	.83 (.03) ***	.82 (.02) ***	1.00 (.02) ***	.96 (.02) ***	.97 (.02) ***	.79 (.03) ***	.72 (.03) ***	.73 (.03) ***
Change in Victimization of Friends (Fall to Spring)	.09 (.02) ***	-.02 (.03)	.00 (.03)	.04 (.02)	-.01 (.03)	-.01 (.03)	.06 (.02) ***	-.03 (.02)	-.01 (.02)
Ethnic Group Representation	.02 (.11)	-.04 (.11)	.12 (.11)	-.01 (.11)	-.20 (.11)	-.16 (.12)	-.01 (.11)	-.15 (.11)	-.07 (.11)
Fall Victimization × Change in Victimization of Friends		.14 (.02) ***	.06 (.02) ***		.12 (.02) ***	.10 (.02) ***		.11 (.01) ***	.08 (.02) ***
Fall Victimization × Ethnic Group Representation		.01 (.11)	-.43 (.11) ***		.49 (.10) ***	.40 (.10) ***		.32 (.11) **	.16 (.12)
Change in Victimization of Friends × Ethnic Group Representation		.24 (.10) *	-.33 (.11) **		.04 (.10)	-.06 (.10)		.05 (.08)	-.18 (.09)
Fall Victimization × Change in Victimization of Friends × Ethnic Group Representation			.68 (.07) ***			.19 (.08) *			.24 (.05) ***
AIC	9785.2	9692.6	9595.3	10845.1	10802.6	10799.6	9970.5	9909.5	9892.6
BIC	9787.1	9694.5	9597.2	10847.0	10804.5	10801.5	9972.4	9911.4	9894.5

Note. Intercept values based on victim nominations received in the spring of 6th grade. Est. = Estimate. S. E. = Standard Error.

* p<.05,

** p<.01,

·100>d

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Table 3 Gradient of Simple Slopes of Change in Victimization from Fall to Spring of 6th Grade Based on Varying Levels of Change in Friends' Victimization

	Reciprocal Friends		Desired Friends		Undesired Friends	
	Gradient of Simple Slope	t-value	Gradient of Simple Slope	t-value	Gradient of Simple Slope	t-value
3 SD Above Mean	1.21	31.15***	1.30	21.53***	1.11	22.04***
2 SD Above Mean	1.09	37.71***	1.19	28.14***	0.99	26.28***
1 SD Above Mean	0.97	42.41***	1.09	39.72***	0.87	30.75***
At Mean	0.85	35.60***	0.98	44.21***	0.75	28.73***
1 SD Below Mean	0.73	23.40***	0.87	27.31***	0.63	19.31***
2 SD Below Mean	0.62	14.68***	0.77	15.86***	0.51	11.53***
3 SD Below Mean	0.50	9.22***	0.66	9.93***	0.39	6.72***

Note. Gradient values >1 represent increases in victimization from fall to spring. Gradient values <1 represent decreases in victimization from fall to spring.

*** p<.001.

Table 4

Differences Between Slopes of Change in Victimization from Fall to Spring of 6th Grade Based on Varying Levels of Change in Friends' Victimization and Ethnic Group Representation

Reciprocal Friends		Desired Friends		Undesired Friends	
Pair of slopes	t-value	Pair of slopes	t-value	Pair of slopes	t-value
(1) and (2)	6.158 ^{***}	(1) and (2)	5.265 ^{***}	(1) and (2)	4.113 ^{***}
(1) and (3)	13.077 ^{***}	(1) and (3)	4.858 ^{***}	(1) and (3)	7.718 ^{***}
(1) and (4)	2.083 [*]	(1) and (4)	7.045 ^{***}	(1) and (4)	4.875 ^{***}
(2) and (3)	6.210 ^{***}	(2) and (3)	0.378	(2) and (3)	3.517 ^{***}
(2) and (4)	-4.811 ^{***}	(2) and (4)	1.020	(2) and (4)	0.071
(3) and (4)	-8.141 ^{***}	(3) and (4)	0.549	(3) and (4)	-2.676 ^{**}

Note. Numbered slopes are depicted in Figure 2. (1) Increase in friends' victimization/high ethnic group representation. (2) Increase in friends' victimization/low ethnic group representation. (3) Decrease in friends' victimization/high ethnic group representation. (4) Decrease in friends' victimization/low ethnic group representation.

* p<.05,
 ** p<.01,
 *** p<.001.